

We Claim:

1. A method for forming a pattern of lesions in a tissue region at or near a sphincter in the anal canal comprising the steps of
 - 5 providing a support structure sized and configured for advancement into the anal canal and carrying an array of electrodes that are coupled to a source of energy capable of heating tissue when transmitted by the electrodes, including a mechanism to
 - 10 selectively retract the electrodes within the support structure and to selectively advance the electrodes in a path outside the support structure to penetrate a tissue region and form, when the energy is transmitted, a pattern of lesions,
 - 15 inserting the support structure into the anal cavity with the electrodes retracted within the support structure,
 - visualizing the dentate line and the alignment of the electrodes with respect to the dentate line
 - 20 through the support structure,
 - aligning the electrodes in a desired location with respect to the dentate line,
 - advancing the electrodes to penetrate tissue at or near a sphincter, and
 - 25 applying energy through the electrodes to create a pattern of lesions in the sphincter.
2. A method for forming a composite lesion in a tissue region at or near a sphincter in the anal canal comprising the steps of
 - 30 providing a support structure sized and configured for advancement into the anal canal and carrying an array of electrodes that are coupled to a source of energy capable of heating tissue when transmitted by the electrodes, including a mechanism to
 - 35 selectively retract the electrodes within the support

structure and to selectively advance the electrodes in a path outside the support structure to penetrate a tissue region and form, when the energy is transmitted, a pattern of lesions,

5 inserting the support structure into the anal cavity with the electrodes retracted within the support structure,

 visualizing the dentate line and the alignment of the electrodes with respect to the dentate line
10 through the support structure,

 aligning the electrodes in a desired location with respect to the dentate line,

 advancing the electrodes to penetrate tissue at or near a sphincter,

15 applying energy through the electrodes to create a first pattern of lesions in the sphincter,

 retracting the electrodes, and

 rotationally shifting the position the support structure in the tissue region, so that advancement the
20 electrodes a second time forms, when the energy is transmitted, a second pattern of lesions rotationally shifted from the first pattern of lesions, together comprising the composite lesion.

3. A method as in claim 1 or 2
25 wherein the visualizing of the dentate line is through a sidewall in the support structure.

4. A method as in claim 2
 wherein the electrodes are deployed through the sidewall.

30 5. A method as in claim 1 or 2
 wherein the energy applied is radiofrequency energy.

6. A method as in claim 1 or 2
 wherein the electrodes are aligned to
35 penetrate internal sphincter muscle.

7. A method as in claim 1 or 2
wherein the electrodes are aligned to
penetrate external sphincter muscle.